

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)**IEEE Xplore®**
RELEASE 1.7[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)**Quick Links**

» Se.

Welcome to IEEE Xplore®

- [Home](#)
- [What Can I Access?](#)
- [Log-out](#)

Tables of Contents

- [Journals & Magazines](#)
- [Conference Proceedings](#)
- [Standards](#)

Search

- [By Author](#)
- [Basic](#)
- [Advanced](#)

Member Services

- [Join IEEE](#)
- [Establish IEEE Web Account](#)
- [Access the IEEE Member Digital Library](#)

 [Print Format](#)[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)**IEEE Xplore®**
RELEASE 1.7[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)**Quick Links**

» Se...

Welcome to IEEE Xplore®

- [Home](#)
- [What Can I Access?](#)
- [Log-out](#)

Tables of Contents

- [Journals & Magazines](#)
- [Conference Proceedings](#)
- [Standards](#)

Search

- [By Author](#)
- [Basic](#)
- [Advanced](#)

Member Services

- [Join IEEE](#)
- [Establish IEEE Web Account](#)
- [Access the IEEE Member Digital Library](#)

 [Print Format](#)[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)



[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)

IEEE Xplore®
RELEASE 1.7

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)

Quick Links

» ABS

Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

[Print Format](#)

[Search Results](#) [PDF FULL-TEXT 536 KB] [DOWNLOAD CITATION](#)



RIGHTSLINK
COPYRIGHT CLEARANCE CENTER, INC.

A-posteriori access strategies in all-optical slotted rings

Bianco, A. Distefano, V. Fumagalli, A. Leonardi, E. Neri, F.

Dipt. di Elettronica, Politecnico di Torino, Italy;

This paper appears in: **Global Telecommunications Conference, 1998. GTC'98. The Bridge to Global Integration. IEEE**

Meeting Date: 11/08/1998 - 11/12/1998

Publication Date: 8-12 Nov. 1998

Location: Sydney, NSW Australia

On page(s): 300 - 306 vol.1

Volume: 1

Reference Cited: 14

Number of Pages: 6 vol. (lxii+lii+3773)

Inspec Accession Number: 6396615

Abstract:

The paper compares a number of strategies devised to gain access in slotted channel all-optical **ring networks** whose nodes have a distinct transmission in each channel and limited transmission/reception capabilities, i.e., one tunable and one fixed receiver. The considered access strategies can be **subdivided** in groups, depending on the information used to select the next packet for transmission. "A-priori" strategies select the packet only according to the knowledge of the transmission queues. "A-posteriori" strategies rely on the knowledge of the state of transmission queues and optical channels. A number of strategies belonging to the former group were recently proposed by the authors and offer an intrinsic hardware simplicity. Two novel strategies belonging to the latter group are proposed in this paper with the aim of assessing the trade-offs between complexity and optical system performance, including achievable throughput and queuing delay. Simulation results obtained under several traffic scenarios show that the increased complexity of a posteriori strategies pays off in terms of performance.

Index Terms:

access protocols delays network topology optical fibre networks packet switching theory wavelength division multiplexing MAC protocol a-posteriori access strategies throughput algorithmic simplicity all-optical slotted WDM rings fixed receiver hardware simplicity network nodes optical channels queuing delay simulation results slotted

[channel networks](#) [system performance](#) [traffic scenarios](#) [transmission queues](#)
[transmission/reception](#) [tunable transmitter](#)

Documents that cite this document

Select link to view other documents in the database that cite this one.

[Search Results](#) [\[PDF FULL-TEXT 536 KB\]](#) [DOWNLOAD CITATION](#)

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) |
[New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)**IEEE Xplore®**
RELEASE 1.7[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)**Quick Links**[» See All](#)**Welcome to IEEE Xplore®**

- [Home](#)
- [What Can I Access?](#)
- [Log-out](#)

Tables of Contents

- [Journals & Magazines](#)
- [Conference Proceedings](#)
- [Standards](#)

Search

- [By Author](#)
- [Basic](#)
- [Advanced](#)

Member Services

- [Join IEEE](#)
- [Establish IEEE Web Account](#)
- [Access the IEEE Member Digital Library](#)

Print Format

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)



[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)

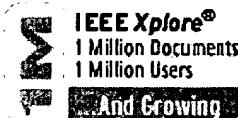
IEEE Xplore®

RELEASE 1.7

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)

Quick Links

» Se...



Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

Print Format

Your search matched **2** of **1038994** documents.

A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or enter a new one in the text box.

splitting<and>ring network

Search

Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

= Your access to full-text

1 Dynamic wavelength assignment for multicast in all-optical WDM networks to maximize the network capacity

Jianping Wang; Biao Chen; Uma, R.N.;

Selected Areas in Communications, IEEE Journal on , Volume: 21 , Issue: 8 , 2003

Pages:1274 - 1284

[\[Abstract\]](#) [\[PDF Full-Text \(715 KB\)\]](#) **IEEE JNL**

2 An efficient algorithm for virtual topology reconfiguration in WDM optical ring networks

Ernest, P.H.H.; Mohan, G.; Bharadwaj, V.;

Computer Communications and Networks, 2001. Proceedings. Tenth International Conference on , 15-17 Oct. 2001

Pages:55 - 60

[\[Abstract\]](#) [\[PDF Full-Text \(160 KB\)\]](#) **IEEE CNF**

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

 Print Format

Your search matched **22** of **1038994** documents.
 A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or enter a new one in the text box.

grouping<and>ring network

 Check to search within this result set**Results Key:****JNL** = Journal or Magazine **CNF** = Conference **STD** = Standard = Your access to full-text**1 Asynchronous group mutual exclusion in ring networks***Wu, K.-P.; Joung, Y.-J.;*

Computers and Digital Techniques, IEE Proceedings-, Volume: 147 , Issue:

1 , Jan. 2000

Pages:1 - 8

[\[Abstract\]](#) [\[PDF Full-Text \(580 KB\)\]](#) **IEE JNL****2 Asynchronous group mutual exclusion in ring networks***Kuen-Pin Wu; Yuh-Jzer Joung;*

Parallel and Distributed Processing, 1999. 13th International and 10th Symposium on Parallel and Distributed Processing, 1999. 1999 IPPS/SPDP. Proceedings , April 1999

Pages:539 - 543

[\[Abstract\]](#) [\[PDF Full-Text \(152 KB\)\]](#) **IEEE CNF****3 Effect of group velocity dispersion on a WDM optical ring network***Majumder, S.P.; Islam, M.R.; Gangopadhyay, R.;*

Lasers and Electro-Optics Society Annual Meeting, 1998. LEOS '98. IEEE , Vol 2 , 1-4 Dec. 1998

Pages:236 - 237 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(144 KB\)\]](#) **IEEE CNF****4 Utilizing the redundant ring in the double ring network***Dabipi, I.K.;*

Southeastcon '89. Proceedings. 'Energy and Information Technologies in the Southeast', IEEE , 9-12 April 1989

Pages:906 - 910 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(236 KB\)\]](#) [IEEE CNF](#)

5 Fault tolerant multiwavelength optical rings with limited wavelength conversion

Gerstel, O.; Ramaswami, R.; Sasaki, G.H.;

Selected Areas in Communications, IEEE Journal on , Volume: 16 , Issue: 7 , 1998

Pages:1166 - 1178

[\[Abstract\]](#) [\[PDF Full-Text \(316 KB\)\]](#) [IEEE JNL](#)

6 A new protocol for route discovery in multiple-ring networks. II.

Multicast, recovery and high-speed processing

Cohen, R.; Segall, A.;

Communications, IEEE Transactions on , Volume: 42 , Issue: 234 , February-1994

Pages:1112 - 1119

[\[Abstract\]](#) [\[PDF Full-Text \(916 KB\)\]](#) [IEEE JNL](#)

7 Dynamic wavelength selective add/drop node comprising tunable gratings

Okayama, H.; Ozeki, Y.; Kunii, T.;

Electronics Letters , Volume: 33 , Issue: 10 , 8 May 1997

Pages:881 - 882

[\[Abstract\]](#) [\[PDF Full-Text \(232 KB\)\]](#) [IEE JNL](#)

8 Analyzing the latency of the Totem multicast protocols

Thomopoulos, E.; Moser, L.E.; Melliar-Smith, P.M.;

Computer Communications and Networks, 1997. Proceedings., Sixth International Conference on , 22-25 Sept. 1997

Pages:42 - 50

[\[Abstract\]](#) [\[PDF Full-Text \(1328 KB\)\]](#) [IEEE CNF](#)

9 Cost effective traffic grooming in WDM rings

Gerstel, O.; Ramaswami, R.; Sasaki, G.;

INFOCOM '98. Seventeenth Annual Joint Conference of the IEEE Computer and Communications Societies. Proceedings. IEEE , Volume: 1 , 29 March-2 April

Pages:69 - 77 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(876 KB\)\]](#) [IEEE CNF](#)

10 Bounding delay on a token ring network with voice, data and facsimile applications: a simulation study

Gaitonde, S.S.; Jacobson, D.W.; Pohm, A.V.;

Computers and Communications, 1989. Conference Proceedings., Eighth Annual International Phoenix Conference on , 22-24 March 1989

Pages:201 - 206

[\[Abstract\]](#) [\[PDF Full-Text \(504 KB\)\]](#) [IEEE CNF](#)

11 A spiral-doublet scanning array

Donnellan, J.;

Antennas and Propagation, IEEE Transactions on [legacy, pre - 1988] , Volume 9 , Issue: 3 , May 1961

Pages:276 - 279

[\[Abstract\]](#) [\[PDF Full-Text \(488 KB\)\]](#) [IEEE JNL](#)

12 Standardization Efforts in Fiber Optics

Schumacher, W.;

Selected Areas in Communications, IEEE Journal on , Volume: 3 , Issue: 6 , November 1985

Pages:950 - 952

[\[Abstract\]](#) [\[PDF Full-Text \(320 KB\)\]](#) [IEEE JNL](#)

13 A fault-tolerant protocol for election in chordal-ring networks with stop processor failures

Yi Pan; Singh, G.;

Reliability, IEEE Transactions on , Volume: 46 , Issue: 1 , March 1997

Pages:11 - 17

[\[Abstract\]](#) [\[PDF Full-Text \(708 KB\)\]](#) [IEEE JNL](#)

14 Multicasting control and communications on multihop stack-ring Optical networks

Ferreira, A.; Fleury, E.; Grammatikakis, M.D.;

Massively Parallel Processing Using Optical Interconnections, 1997., Proceedings of the Fourth International Conference on , 22-24 June 1997

Pages:39 - 44

[\[Abstract\]](#) [\[PDF Full-Text \(500 KB\)\]](#) [IEEE CNF](#)

15 Nonuniform waveband hierarchy in hybrid optical networks

Izmailov, R.; Samrat Ganguly; Kleptsyn, V.; Varsou, A.C.;

INFOCOM 2003. Twenty-Second Annual Joint Conference of the IEEE Computer Communications Societies. IEEE , Volume: 2 , 30 March-3 April 2003

Pages:1344 - 1354 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(496 KB\)\]](#) [IEEE CNF](#)

[1](#) [2](#) [Next](#)
